



Maryland Department of Environment
Water Management Administration
Compliance Program - Eastern Division
407 Race St, Cambridge, MD 21613
410-901-4020

Field Inspection Report by: Michele Burroughs

Media Type(s): NPDES Municipal Minor Surface Water

Inspection Date: July 20, 2012

Site Name: Assateague Island-National Seashore HQ WWTP

Facility Address: 7206 National Seashore Lane, Berlin, MD 21811

County: Worcester County

NPDES Municipal Minor Surface Water

Permit / Approval Numbers: 10DP2530/MD0021091

Site Status: Active

Site Condition: Noncompliance

Contact(s): Richard Mathieu – Operator
Randy Hartz

Recommended Action: Continue Routine Investigation

Inspection Reason: Follow-up (Non-Compliance)

Evidence Collected:

Visual Observation

Inspection Findings:

A. Permit Verification

The facility holds State Discharge Permit 10-DP-2530, NPDES Permit MD0021091, which became effective October 1, 2011 and expired September 30, 2016. The permit renewal application is due to the Department by April 1, 2014. The new permit incorporates a second outfall for the discharge of reuse water, which is designated as DSN 002.

B. Records

May 2012 - The netDMR shows compliance. However, the facility failed to report total flow, as specified in the permit. The laboratory data sheets and chains of custody were available and complete. The average daily flow was reported as 0.003 MGD, the maximum daily flow as 0.006 MGD, and the MOR reported the total monthly flow as 0.1058 MG. The 5/24/2012

orthophosphate result of 0.03 mg/l was reported as 13.50 mg/l on the MOR. A composite sample was started on 5/2/2012 at 13:00 hours and stopped at 6:15 on 5/3/2012. The laboratory results were reported on the MOR for 5/3/2012 instead of 5/2/2012.

April 2012 - The DMR shows compliance. The laboratory data sheets and chains of custody were available and complete. The facility failed to collect a fecal sample on April 7, and a 5 day letter was available. According to Mr. Mathieu, the composite sample is collected started the day before the fecal sample is collected. The chain of custody states that the sample was collected at 6 am on 4/7/2012; however the same chain of custody states that the composite sampler was started at 1500 hours and stopped at 2300 hours and that the fecal sample was collected at 2300 hours. The samples were preserved and delivered to the laboratory on April 9 at 9:30 am. If the composite sample was collected on 4/6/2012, the BOD results reported on the MOR are for April 7 would be invalid due to the fact that the sample was out of the hold time for the test. The DMR reported the average daily flow as 0.02 MGD with a maximum daily flow of 0.0072. The MOR reported the total monthly flow as 0.0713 MG. The average daily flow should have been reported as 0.002 MGD.

March 2012 - The DMR shows noncompliance. The laboratory data sheets and chains of custody were available. The average daily flow was reported as 0.002 MGD, with a maximum daily flow of 0.01 MGD. The total nitrogen monthly average loading was reported as 0.00 lbs/day, the weekly average loading as 0.00 lbs/day, the monthly average concentration as 2.7 mg/l, and the weekly average concentration as 7.77 mg/l with 1 excursion. There was a 5 day letter available for the excursion. The facility samples weekly for organic nitrogen, ammonia, nitrate + nitrite, and ortho-phosphate. The DMR should reflect the facility's sampling frequency. The facility failed to report the total monthly flow on the DMR, as required.

C. Maintenance and Operations

The system consists of a bar screen, followed by vibratory separator, an equalization tank, anoxic tank, an aerobic tank, a second anoxic tank and a reaeration tank. The effluent from the reaeration tanks is filtered through two parallel basket filters prior to treatment by 4 Berghof ultrafilters. A new ultrafilter was installed on 3/4/2012. The permeate from the ultrafilters is disinfected with 2 UV units, followed by storage in a 2000 gallon vertical tank. The facility has installed 2 metal slats in the second anoxic tank, separating the tank into three sections. The first section has a pump, the micro c feed tube and a slat which drops to the bottom of the tank with a round cutout in the steel at the top of the typical liquid level. The fluid flows through the hold in the slat to the second section. During a prior inspection, Mr. Hartz stated that the third slat sat 6 foot off the bottom of the tank. The ultrafilters are cleaned every other week and are now running with a permeate rate of 18-20 gpm. The blowers have been replumbed to allow for isolation of each of the 2 blowers. The facility is using caustic, Interpac 113 and Micro C as chemical additives. Mr. Mathieu stated that the facility uses 2 drums a month of Micro C. Mr. Mathieu stated that they had had problems with the circulator pumps, with the circulator pumps kicking out during power interruptions, but that the influent pump would reenergize. An electrician investigated the pump after the March upset, found a bare wire which was repaired and put back into service. Mr. Mathieu stated that they have not experienced the same problem since the pump repair.

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Due to personnel issues, SOS is acting as superintendent of the facility, David Mathieu has been hired as an operator by the Park Service, and John Adams is a licensed temporary operator.

The facility is in receipt of a new grit system which is in place, but is not operating, according to Mr. Mathieu. The grit system is intended to provide primary treatment for the hauled waste from Assateague Island to the main pump station located at the WWTP.

The gray effluent pipe from the 2000 gallon holding tank to the toilets at the visitors center is presently disconnected and sitting on a rack in the plant. The plumbing fittings are plastic threaded fittings, which would take little time to connect, after the potable water connection is unthreaded and drained. The facility does not have a turbidity meter installed at this time, and Mr. Ennis stated that they do not intend to use the effluent (permeate) to flush the toilets in the near future. The potable water line to the toilets is not labeled, nor is the disconnected gray effluent pipe to the toilets. The valve which would open the line to DSN 002 is locked-out.

D. Self Monitoring Program

The facility tests for dissolved oxygen, pH, and flow on a daily basis. The flow meter was calibrated on 5/2012 by W.G. Malden. According to Mr. Mathieu, the panel view output for the flow meter nor the chart recorder were calibrated. The facility performs daily process testing of the final effluent and test for COD, phosphorus, ammonia, and nitrates.

E. Effluent Receiving Water

The facility was not discharging at the time of the inspection. The permeate appeared to be clear with no odor.

F. Sampling

There were no samples collected during this inspection.

G. Stormwater Pollution Prevention Plan

This facility is not required to develop nor implement a stormwater pollution prevention plan.

H. Corrective Actions

1. The permittee is advised that the facility should operate the facility in compliance with permit requirements, including but not limited to compliance with discharge permit limits.
2. The permittee is reminded of the necessary changes to the Monthly Operating Report (MOR) due to changes in the definition of weekly average (Sunday to Saturday) in the new permit.

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3. The permittee is advised that a DMR is required to be submitted every month for DSN 002 if the facility starts to discharge from this outfall. The permittee is advised that the Department (both Enforcement and Compliance) should be notified 30 days in advance of the connection of DSN 002. The permittee is advised that the potable water pipe located at the plant which serves the toilets at the visitor center should be labeled with directional flow and that the disconnected effluent pipe be tagged to remind personnel that MDE requires notification 30 days prior to connection.
4. The permittee is requested to document the date, the start and stop times for the composite sample on the chains of custody, as well as the date and collection time of the grab sample. The permittee is advised that the sample submitted to the laboratory for analysis for TP, TKN, N+N, and ammonia should be preserved with sulfuric acid to a pH<2.0 s.u.. The chain of custody for fecal samples should have thiosulfate preservation identified on the chain of custody. All samples should be preserved with ice.
5. The permittee is advised that composite sample should be flow-paced.
6. The permittee is requested to resubmit corrected DMRs for DSN 001 from October 1, 2011 through June 2011 to address deficiencies identified in Section B. of this report. The DMRs should be submitted within 21 days of receipt of this report. The new permit requires monthly reporting of total flow.

NPDES Municipal Minor Surface Water - Inspection Checklist

<i>Inspection Item</i>	<i>Status</i>	<i>Comments</i>
1. Does the facility have a discharge permit? [Environment Article §9-323a(1-3)]	No Violations Observed	
2. Is the discharge permit current? Has facility applied for renewal? [Environment Article §9-328a(1)]	No Violations Observed	
3. Is the facility as described in the current permit? Are treatment processes as described in the current permit? [COMAR 26.08.04.01.01B(4)]	No Violations Observed	
4. Has notification been submitted about any new, different or increased discharges? [40 CFR Part 122 Subpart C Section 122.42.b(1-3)]	No Violations Observed	
5. Is the number and location of discharge points as described in the discharge permit? [Environment Article §9-3314]	No Violations Observed	
6. Has permittee submitted correct name and address of receiving waters? [40 CFR 122.21.j(3)]	No Violations Observed	
7. Is the permittee meeting the compliance schedule per permit requirements? [COMAR 26.08.04.02-1.02-1A(3)]	No Violations Observed	

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8. Has the operator or superintendent been certified by the Board in the appropriate classification for the facility? [COMAR 26.06.01.05A(1)]	No Violations Observed	
9. Are adequate records being maintained for the sampling date, time, and exact location; analysis dates and times; individual performing analysis; and analytical results? [COMAR 26.08.04.03.03B(3)(a, b, c, e)]	No Violations Observed	
10. Are adequate records being maintained for the analytical methods/techniques used? [COMAR 26.08.04.03.03B(3)(d)]	No Violations Observed	
11. Does the permittee retained a minimum of 3 years worth of monitoring records including raw data and original strip chart recordings; calibration and maintenance records; and reports? [COMAR 26.08.04.03.03B(1)]	No Violations Observed	
12. Is the lab and monitoring equipment being properly calibrated and maintained? Are they keeping records to reflect this? [Environment Article §9-3313]	No Violations Observed	
13. Is laboratory controls and appropriate quality assurance procedures properly operated and maintained? [40 CFR Part 122 Subpart C Section 122.41.e]	No Violations Observed	
14. Has the permittee submitted the monitoring results on the proper Discharge Monitoring Report form? [COMAR 26.08.04.03.03C(1)]	No Violations Observed	
15. Has the permittee submitted these results within the allotted time? [COMAR 26.08.04.03.03C(2)]	No Violations Observed	
16. Are discharge monitoring reports complete and reflect permit conditions? [COMAR 26.08.04.03B(3)]	Out of Compliance	See findings.
17. Is the facility being properly operated and maintained including:(a) stand-by power or equivalent provisions available, (b) adequate alarm system for power or equipment failure available, (c) all treatments units are in service, . [40 CFR Part 122 Subpart C Section 122.41.e]	No Violations Observed	
18. Is sewage sludge managed correctly per permit requirements? [COMAR 26.04.06.03.03]	No Violations Observed	
19. Any by-pass since last inspection? Has permittee submitted notice of any by-pass? [40 CFR Part 122 Subpart C Section 122.41.m(4)(i)(C)]	No Violations Observed	

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20. Any non-complying discharges experienced since last inspection? Has regulatory agency been notified? [40 CFR Part 122 Subpart C Section 122.41.I(6)]	Out of Compliance	See findings.
21. Have overflows occurred since the last inspection? [COMAR 26.08.10.02A]	No Violations Observed	
22. Has records of overflows been maintained at the facility for at least five years? [COMAR 26.08.10.06A-B]	No Violations Observed	
23. Are flow measuring devices properly installed and operated, calibration frequency of flow meter adequate, flow measurement equipment adequate to handle expected ranges of flow? [40 CFR Part 122 Subpart C Section 122.41.e]	Out of Compliance	See findings.
24. Are discharge monitoring points adequate for representative sampling? Do parameters and sampling frequency meet the minimum requirements? Does the permittee use the method of sample collection required by the permit? [Environment Article §9-331(4)]	No Violations Observed	
25. Are analytical testing procedures approved by EPA? If alternate analytical procedures are used, proper approval has been obtained? [COMAR 26.08.01.02B(1)]	No Violations Observed	
26. Has the permittee notified the Department of the name and address of the commercial laboratory? [COMAR 26.08.04.03.03A(3)]	No Violations Observed	
27. Were discharges observed at the authorized outfalls? Does the facility have any unauthorized discharges to waters of the State? [Environment Article §9-322]	No Violations Observed	
28. Does the discharges or receiving waters have any visible pollutants (oil sheen, grease, turbidity, foam, floating solids, color), odor, noncompliant DO concentrations, and/or noncompliant temperature ranges? [Environment Article §9-314b(1)]	No Violations Observed	
29. Were discharge samples collected? [Environment Article §9-261c(1)]	No Violations Observed	
30. Is the facility required to have a storm water pollution prevention plan? Has storm water pollution prevention plan been developed and implemented as required? Does storm water pollution prevention plan require modifications to prevent runoff of pollutants? [40 CFR Part 122 Subpart B Section 122.26.c(1)(I)(A-B)]	Not Applicable	
31. Are the permit conditions being met? [Environment Article §9-326a(1)]	Out of Compliance	See findings.

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Inspector: _____
Michele Burroughs

Received by: _____